South Downtown Advisory Group
Draft Notes from Meeting #5, August 25, 2005

Steve Moddemayer facilitated the meeting, first asking about advisors' knowledge about environmental sustainability, then presenting sustainability principles, and requesting input from the advisors on possible City approaches in the South Downtown area.

For a summary of the key discussion points, see the top of page 3 at the beginning of the discussion summary.

DEFINITION OF SUSTAINABILITY

The advisors offered a number of definitions.

- Something that will "endure over time."
- "Smart growth is sustainable."
- "Good stewardship of the environment and resources in every decision we make."
- "Using fewer resources than would otherwise occur."
- Don't preclude the options for future generations by actions in the present that will permanently consume natural resources.
- Buildings and new projects that will last over time and contribute to the neighborhood.
- Choices that will "facilitate a rich quality of life." It is not just about water runoff or energy.
- Urban sustainability is more than just green buildings.
- Relationships to global systems; how at a neighborhood level, we can be more integrated with the environment re: air quality, healthy conditions, habitat.

PRESENTATION

Steve's presentation was about sustainability in the context of South Downtown and Seattle, its policies and practices, and potential opportunities to improve conditions over time. He described moving toward sustainability as a journey, choosing to do the things we can do sooner versus later, being opportunistic, and carefully examining the comparative costs and benefits of City actions.

There are ***natural environment*** components applicable to this area, including air quality, water quality, amount and speed of runoff, sewer volumes, contributions of urban development toward increased temperature, energy consumption. We should try to shrink our ecological footprint in ways that increase efficiency and also livability.

Urban sustainability also involves promoting great places and great buildings, efficient infrastructure, vibrant economies and vital communities, and interesting and safe environments where people want to be.

There are ***public and private opportunities*** to support sustainable practices.

- Review how we prioritize the uses of the public rights-of-way.

- Review how we deal with stormwater runoff—today, hard surfaces immediately route rain to sewers, rather than evaporating or soaking into soil and vegetation. This quick runoff drives huge costs to provide sewer infrastructure, which potentially could be avoided or reduced with improved sustainable treatments for stormwater. Treatments may include:
  - green roofs
  - cisterns (tanks) to detain roof runoff
  - surface vegetation in a variety of treatments
- ***Alternative energy arrangements***, such as energy districts, ground source heating and cooling, sharing excess heat among users
- ***Other***: reducing waste generation, getting food from more local sources

Ways to measure cost effectiveness:
The analysis of cost should use methods that accurately represent long-term cost versus value. This might include: life-cycle cost assessment, cost-benefit analysis, etc. Achieving "economies of scope" is about planning for multiple benefits due to synergies that result from complementary improvements—such as improved runoff control, better open space, improved habitat and reduced utility costs that could arise from integrated street, utility and open space improvements.

Examples:
Cited examples of existing sustainable features include rainwater collection systems at City Hall and the Downtown Library, as well as the green roof on City Hall. Inter-Im has planned a system that would divert runoff toward street planters and possibly the Danny Woo Gardens, with solar panels for powering the pumps.

Steve illustrated a few prototypes that might be implementable in this study area.

1) Provide 15-ft. wide vegetated strips along a currently paved wide street, which would reduce runoff, clean up runoff and green up the street.
2) New utilities installed in alleys might allow sharing of heating/cooling resources within a local energy district, along with other benefits of green roofs and new sustainable development in vacant lots.
3) Streetscape improvements that include a "stormwater plaza," sidewalk with subsurface drainage retention capabilities, and additional landscaping to increase stormwater infiltration efficiency. An existing City "SEA Street" prototype in North Seattle actually provides 100% rainwater retention while clearing up past flooding problems, a better performance than anticipated.

Relationship to historic district:
Steve noted that the City will need to examine how features like green roofs would fit in with the current historic district regulations.

DISCUSSION SUMMARY

A summary of the most important questions raised by advisors includes:

- Knowledge of past failures in technology (such as solar energy) and publicity on shortcomings of green roofs and energy costs at City Hall led some advisors to express caution and skepticism—will these sustainable systems work?
- How much will it cost, and who pays?
- What kinds of incentives or discounts in other costs can be provided to the developer to encourage inclusion of sustainable features in new development?
- What are the most important sustainability priorities that the City and public should be tackling at this time?

Green Roofs

Will they really work or would they fail? An advisor noted skepticism about the long-term functionality of green roofs. Steve noted 15 years of research and recent experience in Portland, and a transition now from "good intentions" to "good technology." Green roofs should double the life of the roof, and currently cost about $4 per square foot more than a conventional roof.

Portland has green roof financial incentives, because they are under federal orders to eliminate sewer overflows into the river.

Infrastructure Benefits

One advisor noted: Perhaps, rather than sinking a lot of money into "bottom of the pipe" infrastructure investments, we should look at the issue more comprehensively above-ground, investing more in some of these improvements that might be better, cheaper and have other benefits such as for habitat improvement. Another advisor rephrased this idea as "buying sewer conservation."

Need for Incentives

A developer advisor stated: He would like to have incentives to do this and proof it works before doing it. Perhaps if there was a reduced or eliminated need for costly stormwater retention tanks. Or, if a discount was provided on electrical vault costs (in relation to expected reductions in energy demand from a sustainable building). Or, if electrical vaults can be installed in City rights-of-way instead of private property. Another advisor that led a recent development indicated: let's also look at the building codes to see where good design opportunities may be prohibited, such as where windows are not allowed.

One advisor noted the higher upfront costs of green buildings. Another suggested an upfront tax incentive to address upfront costs. Steve noted a possible "sustainability bank" that might offer loans to cover the cost difference of going green.

On the topic of street improvements, an architect advisor asked, "isn't the developer responsible for providing the streetscape improvements? If so, unless the City helps fund those improvements, you're asking the private sector to step forward and bear that cost."

Who pays?

An advisor inquired, "Who is going to pay for it? That is a chronic question on these environmental issues. What is the nexus? It's all about the costs to the developer." There needs to be some way to assess and communicate the benefits, and reduce the costs to the private sector. Steve again noted the concept of a sustainability bank, offering low-interest loans or bonding to finance the sustainable design elements. Another advisor agreed that those kinds of financing tools would help, especially when you consider the typical pattern of many upfront costs in development.

Setting Priorities

An advisor asked, "Is there a hierarchy of practicality that the City can set in these possible approaches?" Another asked, "Which of the sustainability topics are most important—energy, stormwater, increased "heat island" temperature effects? The City should target the most critical topics and opportunities."

An advisor experienced in sustainability noted that we should look at the global issues, then look at what we can do locally. For example, we could address global warming issues locally by reducing carbon emissions, reducing the heat island effect and reducing energy use. The effort should be within both the public and private realms—we should examine what synergies can be created, from building to building, and what can be shared, overlapped and borrowed at a neighborhood level.

A developer advisor suggested that efforts to increase public awareness and provide design information, such as a resource center, would educate the public and bring about more public consensus in favor of environmentally protective and sustainable practices.

Assessing locations for changes

An advisor asked, "How will possible sustainable street improvements relate to the historic districts in terms of sidewalk use, subsurface areas and sewer systems? What should be the street character? It seems possible to do, but shouldn't be done in a haphazard fashion."

The same advisor suggested there will be good opportunities for sustainability where the whole site will be transformed—such as the Goodwill site, south-of-Dearborn Way vicinity, Stadium North Lot and waterfront areas.

An advisor indicated that low-traffic streets do make sense as a place to start with improvements (Occidental, Second Ave. S. and other pedestrian corridors). A second advisor agreed that Occidental is a good candidate for complementary streetscape improvements.

City should take the lead

Several advisors suggested the City should take the lead on implementing sustainability. One advisor noted the amount of publicly-owned land, and commented that the City should play the catalyzing role, being "out on the edge" to prove there are ways to

improve sustainability. We should be able to see results if sustainability is embedded in the City's policies, budgets, practices and operating procedures.

Steve responded by noting that sustainability is on the Mayor's action agenda and is being implemented by the City. We are exploring what works, what makes sense and what will be defensible. Also, Steve commented that the City should take the approach of concentrating public investments in a way that would use the public's money better—this won't necessarily cost more, it would mean that the funds are differently used.

Other Comments/Questions

- In order to reach full sustainability, does that mean full replacement of all existing buildings would be needed? (Response: No. Sustainable principles would be incorporated in new development and when there are good opportunities. Improvements in performance would occur over time.)
- On the topic of parking and automobile use, one advisor noted perhaps we should tax items differently to discourage auto ownership.
- One advisor suggested that the City could encourage better choices in materials, such as aluminum or PVC plastic roof coverings rather than tar roofs. On his building, this reduces temperatures by being more reflective.
- "Does this area have the long-term utility infrastructure capacity needed?"

PUBLIC COMMENT

Jayson Antonoff indicated that in our search for sustainable strategies we should look for the "sweet spot" that is the intersection of the public and private domains. An energy district is one example.

John Chaney discussed the relationship of LEED standards to the historic district.

- Many old materials are clean, nontoxic and durable and should count toward evaluations of sustainable buildings.
- Evaluation of sustainability should account for existing energy that is already embodied in past construction of historic buildings and other existing systems.
- Given the above, it would be horrendous to contemplate replacing a demolished historic building with a new LEED-certified building and call it a positive.

This topic really relates to how you approach major change. Preferably there is a plan that will make everything work out (resulting in coordination among various departments and projects). One opportunistic example is that 1st Avenue median tree plantings only possible because historic streetcar precluded utilities in that location.

On bank practices, the low availability of financing currently makes it difficult to do some of these changes (better assistance needed from these institutions)

The public sector does need to lead, but haven't seen that firm public commitment yet.

On considering incentives for green roofs: a new large building will be "forever", and he hopes the green roofs will also be "forever."